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HARRISON & EGBERT 412 MAIN STREET 7TH FLOOR HOUSTON, TX 77002			NOLAN, DANIEL A	
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Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	09/622,396	D'AGOSTINI, GIOVANNI
	<b>Examiner</b>	<b>Art Unit</b>
	Daniel A. Nolan	2654

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 29 September 2000.  
 2a) This action is **FINAL**.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-13 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-13 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 29 September 2000 is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
     1. Certified copies of the priority documents have been received.  
     2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
     3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | Paper No(s)/Mail Date. _____ .  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|   | 6) <input type="checkbox"/> Other: _____ .                                  |

## **DETAILED ACTION**

### ***Response to Amendment***

1. The preliminary amendment filed with the application was not applied because the referenced lines to be changed did not agree with the original.

The Examiner is proceeding with the understanding that those changes that could be applied correspondingly will be maintained in the substitute specification called for, such as the new Abstract" and the dependencies of the claims (to claim 1).

### ***Specification***

2. A substitute specification including the claims is required pursuant to 37 CFR 1.125(a) because the preliminary amendment (that was not applied) indicates that intended changes would be extensive and not simple. Complicated interlineations or cancellations made in the specification or amendments to the claims could lead to confusion and mistake during the issue and printing processes. Accordingly, the portion of the specification or claims as identified below is required to be rewritten before passing the case to issue. See 37 CFR 1.125 and MPEP § 608.01(q).

A substitute specification filed under 37 CFR 1.125(a) must only contain subject matter from the original specification and any previously entered amendment under 37 CFR 1.121. If the substitute specification contains additional subject matter not of record, the substitute specification must be filed under 37 CFR 1.125(b) and (c)

3. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification, such as:

- Extraneous indicatores (such as "DD." line 21 page 16, "GG." line 5 page 18, etc.) must be removed.
- Claim language should not be in the specification (as, "for" pages 13-14, line 21 page 16, line 26 page 11, pages 12-13, page 4 lines 17 & 19, "a1.", line 24 page 22, etc.)
- Space should follow comma (line 1 page 3).

4. The summary of the invention is not a summary at all, but amounts to a mere recitation of the claims that is contrary to CFR § 1.73:

*"Summary of the invention: A brief summary of the invention indicating its nature and substance, which may include a statement of the object of the invention, should precede the detailed description. Such summary should, when set forth, be commensurate with the invention as claimed and any object recited should be that of the invention as claimed."*

Considering this cosmetic makeover of the claims as part of the disclosure amounts to having the claims provide the only specification for themselves, evidenced by the use of claim language. Such circular reasoning is invalid and cannot be allowed. Appropriate correction is required.

5. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested:

"Interactive Paper Translation using Alternate Dictionaries".

6. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required:

- Support for the term "C-like" in claims 12 & 13 (lines 17 & 22) is not provided in the disclosure. The Examiner is proceeding with the understanding that reflexive paths are intrinsically obvious in paper handling mechanisms.
- The disclosure does not support the "*the words lacking during the research of the words*" in claim 1 line 20. The Examiner is proceeding with the understanding that "words not translated" are intended.
- The term "*stop ... in course*" is not in the disclosure. The Examiner is proceeding with the understanding that the term should be "in process" (line 4 page 16).

#### ***Information Disclosure Statement***

7. The listing of references in the specification (lines 14, 26 page 1, line 27 page 2, line 17 page 3, etc. through at least the 12<sup>th</sup> page) is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate

paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

### **Claim Objections**

8. Claims 1-14 are objected to because of the following informalities:

- The reference numbers cited in the claims do not correspond to the drawings.  
For example, claim 1 (line 8) there is no item (4-45-455).
- In claim 1, the feature beginning on line 4, page 27 is incomplete.
- Claim 1 contains the negative word "lacking" which suggests that an element is being subtracted (line 20 page 26). This is improper, and should be corrected by redrafting the claim, or the earlier claim being limited.
- In claim 1, the term *them* (line 4 page 27) is subject to misinterpretation without studying the drawings. The Examiner is proceeding with the understanding that the intent is to "add to the dictionary with all of the original input in the 2<sup>nd</sup> storage, the translation in the 3<sup>rd</sup> storage and the behaviour code, inclusively."
- The claims contain dashes '-', which is not standard practice. Consider replacing with a comma, or the word 'to' for ranges.
- In claim 3, the variables and formulae "(1\*n) +" and "(n)+" must be explained in the claims.
- In claim 4, the semicolon (line 26) renders the subsequent feature incomplete. The Examiner is proceeding with the understanding that a comma "," was intended.
- Claim 4 contains a double article 'the said.' Eliminate one article (page 28 line 1).

- In claim 5, the period needs to be removed from line 11.
- In claim 5, "online" should be one word (line 12).
- In claim 5, "couple of" is imprecise and should be removed (from line 14).
- In claim 6, the limitation of "on the base of an absolute maintenance" (line 26) does not correspond to wording in the disclosure (page 16 line 27).
- In claim 6, the word "a" needs to be inserted before the word "way" (line 6).
- Claim 8 contains a double article 'the said.' Eliminate one article (page 29 line 22).
- In claim 9, the word "with" should precede "respect" (line 4).

Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 112***

9. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

10. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

11. Claims 1, 2, 3, 6 and 8 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

In claims 1, 2, 6 and 8, the feature of a “behaviour code” is not explained sufficiently for that an artisan to know whether to use it to indicate that a change was made, that a particular kind of change was made and, in either case, whether to indicate the state determining or resulting from the translation. The Examiner is proceeding with the understanding that a value in this field would indicate that a change has been effected for statistical use.

In claim 1, the feature of *“progressive translation”* is not specified so that an artisan would be able to select with any certainty the many interpretations of the word “progressive” to produce the results intended by the application. The Examiner is proceeding with the understanding that the term indicates that the translation progresses sequentially in the order the words are written or spoken.

In claim 3, neither the feature claimed for “traits” nor the formulae appearing in the claim are mentioned in the disclosure, thereby failing to provide an artisan with the necessary specifications to carry out the invention. The Examiner is proceeding with the understanding that any attribute would serve the claim.

In claim 8, the *“field of personalization”*, is not specified in such a way that would provide specification for an artisan to carry out the invention.

In claim 11, the feature of *“a translator bench”* is not mentioned elsewhere in the disclosure.

12. Claim 1-3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

13. Claim 1 recites the limitation " *of the type* " in lines 2-3. There is insufficient antecedent basis for this limitation in the claim.

14. Claims 2 and 3 recite the limitation "*said interactive window*" (lines 9 and 18, respectively). There is insufficient antecedent basis for this limitation in the claims.

#### ***Claim Rejections - 35 USC § 103***

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which **the** subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

**Miyao et al & Kutsumi et al**

17. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyao et al (U.S. Patent 4,800,522 A) in view of Kutsumi et al (U.S. Patent 5,625,553).

18. Regarding claim 1 as understood by the Examiner, Miyao et al, with the *bilingual translation system capable of memorizing learned words reads on the feature*, reads on the features of the claim for a *machine translation system using a computer translator* as follows:

- Miyao et al reads on the feature of a *1<sup>st</sup> storage of words and strings of more words with respective correct translations forming a dictionary of words and sentences or sentence portions* (6 &"buffer A" in figure 4);
- Miyao et al reads on the feature of a *2<sup>nd</sup> to receive and store a text to be translated in a screen field or 2<sup>nd</sup> storing* (3 in figure 2).
- Miyao et al reads on the feature of a *3<sup>rd</sup> to store the translated text in a 2<sup>nd</sup> screen field or 3<sup>rd</sup> storing* (figure 7(b) S14);
- Miyao et al reads on the feature of a *4<sup>th</sup> to find in progression the words of the text to be translated and compare them with the words of the 1<sup>st</sup> to obtain a progressive translation* (with the sequential operation indicated in figure 7(b) with S21) and:

- Miyao et al reads on the feature to *opt from a completely automatic kind of translation to an interactive translation or vice versa, before beginning the translation* (column 4 lines 5-10).
  - Miyao et al reads on the feature to *display in a display window on the screen* (S28 figure 8):
  - Miyao et al reads on the feature that *the words lacking during the research of the words and the translated sentences at the completion of the translation of each sentence* (figure 7(b) S24); and
  - Miyao et al reads on the feature to *allow their correction and storage* (S15 figure 8);
  - Miyao et al reads on the feature to *highlight and store a translated word or sentence portion, concerning modification by the operator* (S29 figure 8); and
  - Miyao et al reads on the feature to *highlight and store the corresponding word or sentence portion of the sentence to be translated* (claim 1 lines 55-56).
  - Miyao et al maintains neither the equivalent of a behaviour code nor the dictionary.
- Kutsumi et al, with the invention for a *machine translation system generating a default translation*, reads on the feature to *memorize a respective behaviour code of the modification of the translated word or sentence portion* (with the *default transaction flag S8 & S7* in figure 10) and to *integrate the 1<sup>st</sup> storage with them, forming a dictionary of words and sentences or sentence portions for self modification in the next sentences to be translated* (figure 11 – see claims 7, 8 and 9). It would have been obvious to a person of ordinary skill in the art of speech signal processing at the time of the invention

to apply the method/teachings of Kutsumi et al to the device/method of Miyao et al to save processing by recalling previously translated words.

19. Regarding claim 2 as understood by the Examiner, the claim is set forth with the same limits as claim 1. Miyao et al reads on the feature that the *interactive window* (the *display* of column 4 lines 16-30) *at least three sentences lines/fragments or control and input strings are provided* (In figure 4 as 5 with buffers A through E), *the 1<sup>st</sup> as a fragment of the sentence to be translated corresponding to the correction made* (column 3 lines 39-40); *the 2<sup>nd</sup> as a portion concerning the correction of the translated sentence* (column 3 lines 44-46).

Where Miyao et al does not provide the equivalent of the *behaviour code*, Kutsumi et al shows the record layout that corresponds to the feature of *the 3<sup>rd</sup> as behaviour code corresponding to the portion concerning the correction (2<sup>nd</sup> & 3<sup>rd</sup> columns of figure 12)*. It would have been obvious to a person of ordinary skill in the art of speech signal processing at the time of the invention to apply the method/teachings of Kutsumi et al to the device/method of Miyao et al so as to preserve prior decisions to be subsequently applied.

20. Regarding claim 3 as understood by the Examiner, the claim is set forth with the same limits as claim 1. Miyao et al reads on the feature *where in the interactive window (the display of column 4 lines 16-30), a line representing a series of numbers is further provided, in which the number are represented in logic succession with traits of single*

*words translation (1\*n)+ and traits of words sets translation (n)+* (as shown in Table 1 where each translation is numbered).

**Miyao et al, Kutsumi et al, Doi<sup>'587</sup> & Doi et al<sup>'189</sup>**

21. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Miyao et al in view of Kutsumi et al and further in view of Doi<sup>'587</sup> (U.S. Patent 4,791,587 A) and further in view of Doi et al<sup>'189</sup> (U.S. Patent 5,351,189 A).

22. Regarding claim 4 as understood by the Examiner, the claim is set forth with the same limits as claim 1. Miyao et al reads on the feature *that includes at least two fields in parallel, adjacent and placed side-by-side, one for the document to be translated and one for the translation* (column 4 lines 16-19 & table 1) but neither Miyao et al nor Kutsumi et al speak to the appearance of more than one document to be translated.

Doi<sup>'587</sup>, in the invention *for translation of sentences to another language*, teaches the features that would *allow the contemporary variation of both fields dimension, one for the text to be translated and one for the translated text* (3a & 3b in figure 2), and *maintain the two fields at the same height* (E11 & E12 with J11 & J12 in figure 3) with the *proportion the width of both fields in inverse proportion to the length of the two documents: original and translation* (with showing column 3a as narrower than column 3b in figure 3). It would have been obvious to a person of ordinary skill in the art of speech signal processing at the time of the invention to apply the method/teachings of

Doi<sup>587</sup> to the device/method of Miyao et al & Kutsumi et al use visual alignment to associate source with corresponding translation texts.

Where neither Miyao et al, Kutsumi et al nor Doi<sup>587</sup> mention *scrolling*, Doi et al<sup>189</sup>, with the invention for a *machine translation system including separated side-by-side display of original and corresponding translated sentences*, reads on the feature *that includes at least two fields vertically scrollable in parallel* (A-T in figure 5 – see column 5 line 60), *adjacent and placed side-by-side, one for the document to be translated and one for the translation* (SA & SB in figure 2). It would have been obvious to a person of ordinary skill in the art of speech signal processing at the time of the invention to apply the method/teachings of Doi et al<sup>189</sup> to the device/method of Miyao et al, Kutsumi et al or Doi<sup>587</sup> for the well-known design technique of processing an entire input rather than artificially constraining work to only those few lines that can appear on a single stationary screen.

#### Miyao et al, Kutsumi et al & Cherny

23. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Miyao et al in view of Kutsumi et al and further in view of Cherny (U.S. Patent 6,085,162 A).

24. Regarding claim 5 as understood by the Examiner, the claim is set forth with the same limitations as claim 1. Neither Miyao et al nor Kutsumi et al mention a *parallel dictionary*. Cherny, with the invention for a *translation system and method in which words are translated by a specialized dictionary and then by a general dictionary* reads

on the features *that during the exposition of the interactive translation window (4<sup>th</sup> line from end of the Abstract), after selection of a word of the sentence or portion to be translated in window, activates the consultation of a parallel dictionary that suggests alternative translations of the selected word*, (column 4 lines 20-28) *thus giving the operator the possibility to consult on line a respective consultation dictionary.*

Cherny then reads on the features of the *stop control of the interactive translation in course (in process, column 7 lines 18-20), which stores in accumulation, in separate couple of fields (column 7 lines 23-25): the part already translated and corrected and the corresponding part of the document that had to be translated* (column 7 lines 29-33).

It would have been obvious to a person of ordinary skill in the art of speech signal processing at the time of the invention to apply the method/teachings of Cherny to the device/method of Miyao et al, Kutsumi et al so as to avoid misunderstanding by verifying and making corrections as soon as errors are detected.

**Miyao et al, Kutsumi et al & Takeda et al**

25. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Miyao et al in view of Kutsumi et al and further in view of Takeda et al (U.S. Patent 5,349,368 A).

26. Regarding claim 6 as understood by the Examiner, the claim is set forth with the same limitations as claim 1. Neither Miyao et al nor Kutsumi et al mention *punctuation*. Takeda et al, with the invention for *machine translation*, reads on the feature *for carrying*

*out the post-correction after translation of the text, on the field of the translation (E→I in figure 4), as follows:*

- Takeda et al reads on the feature of *determining the position of the cursor in the correction area or otherwise if a portion is stored by highlighting (c, e in figure 8), calculate automatically the number of the corresponding sentences and, words of the translated document, from the origin and,*
- Takeda et al reads on the feature (that, on the basis of absolutely maintaining) *the punctuation positions, supply in a screen window the sentence portion previously highlighted in the correction area or the whole concerned sentence (column 3 lines 45-50) located from presence of the cursor since the last correction and*
- Takeda et al reads on the feature of *the corresponding sentence of the document to be translated, in order to allow the operator to delimit by highlighting the sentence fragment corresponding to the one concerned by the correction (column 3 lines 51-56)*

It would have been obvious to a person of ordinary skill in the art of speech signal processing at the time of the invention to apply the method/teachings of Takeda et al to the device/method of Miyao et al & Kutsumi et al to synchronize translation with original text.

Miyao et al does not maintain the equivalent of a behaviour code. Kutsumi et al reads on the feature *supply a corresponding behaviour code for the storage, (with the default transaction flag S8 & S7 in figure 10) substantially similarly to that used during the action of the interactive translation* (figure 11 – see claims 7, 8 and 9). It would

have been obvious to a person of ordinary skill in the art of speech signal processing at the time of the invention to apply the method/teachings of Cherny to the device/method of Kutsumi et al to save processing by re-using previously translated words.

**Miyao et al, Kutsumi et al & Brooks et al**

27. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Miyao et al in view of Kutsumi et al and further in view of Brooks et al (U.S. Patent Publication 2002/0169616 A1).

28. Regarding claim 7 as understood by the Examiner, the claim is set forth with the same limitations as claim 1. Neither Miyao et al nor Kutsumi et al detail the screen layout. Brooks et al, with the invention for a *voice interaction method for a computer graphical user interface*, reads on the features of a *controls bar provided for the control operations forming substantially a "T"-like base interface in which the upper cap of the "T" is the controls bar which by the association of virtual buttons, and the shank of the "T" substantially divides the right field from the left field of the fields couple of the document to be translated and translated document* (as with figure 3, where the options in the left window segment corresponding to source with the , while the corresponding results appearing in the right window correspond to translations).

It would have been obvious to a person of ordinary skill in the art of speech signal processing at the time of the invention to apply the method/teachings of Brooks et al to the device/method of Miyao et al or Kutsumi et al to lay out the window in the well-

established manner that reflects processing from left-to-right, each having a scroll bar (that obviously can be seen to form the downstroke of the "T"), with controls shared by both sides occurring above (obviously forming the top of the "T").

**Miyao et al, Kutsumi et al & Fukumochi et al**

29. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Miyao et al in view of Kutsumi et al and further in view of Fukumochi et al (U.S. Patent 5,289,375)

30. Regarding claim 8 as understood by the Examiner, the claim is set forth with the same limitations as claim 1. Miyao et al teaches the feature of *storing in interactive memory a field of the sentence fragment portion following the 1<sup>st</sup> word* (column 3 lines 39-40) and *a translation field for the whole fragment* (column 3 lines 45-46). Miyao et al does not disclose the equivalent *behavior code*.

Kutsumi et al teaches a layout that includes a field of the 1<sup>st</sup> word of the sentence fragment, for the research (as [Entry Word] in figure 8), a behaviour code field, a field of personalization (appearing as Default Translation Flag and /-Case Semantic Restriction columns in figure 8). It would have been obvious to a person of ordinary skill in the art of speech signal processing at the time of the invention to apply the method/teachings of Kutsumi et al to the device/method of Miyao et al so as to have available the results of analysis to apply when similar combinations appear.

Neither Miyao et al nor Kutsumi et al speak to considering the characteristics of the initial word. Fukumochi et al, with the invention for a *translation machine*, teaches

the feature *that the teaching is automatically stored in the interactive memory, that includes a field of the 1<sup>st</sup> word of the sentence fragment, for the research* (S103 in figure 12), *a field of the sentence fragment portion following the 1<sup>st</sup> word* (S104 in figure 12) *in function of the selected sector or work domain being further provided* (S105→S107 in figure 12). It would have been obvious to a person of ordinary skill in the art of speech signal processing at the time of the invention to apply the method and/or teachings of Fukumochi et al to the device/method of Miyao et al or Kutsumi et al so as to process translations according to normal conversation or containing specialized communications.

**Miyao et al, Kutsumi et al, Cherny & Crasnianski et al**

31. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Miyao et al in view of Kutsumi et al and further in view of Cherny and further in view of Crasnianski et al (European Patent FR 2659461 A1).

32. Regarding claim 9 as understood by the Examiner, the claim is set forth with the same limitations as claim 1. While Miyao et al does not mention scanning, Kutsumi et al incorporates an OCR (column 4 line 64) which obviously employs scanning but are silent as to specifics. Cherny teaches the more complete details *that: a scanner is inserted in its case* (column 4 lines 11-17) *the computer or scanner being associated/associable to OCR system for characters recognition* (206→208 in figure 2) but does not indicate the physical location.

Crasnianski et al, with the *device for the automatic translation of a document*, reads on the feature of the *computer case having an entry of the paper to be scanned placed on the side respect to the front* (5 in figure 2). It would have been obvious to a person of ordinary skill in the art of speech signal processing at the time of the invention to apply the method/teachings of Cherny & Crasnianski et al to the device/method of Miyao et al & Kutsumi et al for a self-contained unit that can viewed and typed at the same time a document is being scanned and recognized to avoid the delay, expense and error of transcription.

**Miyao et al, Kutsumi et al, Cherny & Nunes et al**

33. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Miyao et al in view of Kutsumi et al and further in view of Cherny and further in view of Nunes et al (U.S. Patent 6,304,742 B1).

34. Regarding claim 10 as understood by the Examiner, the claim is set forth with the same limitations as claim 1. Neither Miyao et al nor Kutsumi et al mention an integrated printer. Cherny reads on the feature of being *integrated in its case a printer* (column 4 lines 33-60 – see line 45) but does not stipulate that *the paper exits to the side*. Nunes et al reads on that feature *with side exit of the printed paper* (column 6 line 45). It would have been obvious to a person of ordinary skill in the art of speech signal processing at the time of the invention to apply the method/teachings of Miyao et al nor Kutsumi et al to the device/method of Cherny and further in view of Nunes et al so as to have a self-

contained unit without the output conveniently placed to be accessible but not interfering with simultaneous input.

**Miyao et al, Kutsumi et al & Cherny**

35. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Miyao et al in view of Kutsumi et al and further in view of Cherny.

36. Regarding claim 11 as understood by the Examiner, the claim is set forth with the same limitations as claim 1. With no further specification other than that provided by the prior art of Oon (U.S. Patent 6408266 B1), which discloses *working from a text edit area called a word bench* (see lines 3-4 of extracted summary), Miyao et al reads on the feature of a *translator bench* (buffers A-E in figure 4).

Where neither Miyao et al nor Kutsumi et al read on the integrated aspect of scanner/printer, Cherny reads on the feature of being *able to operate as a machine translator with a computer, scanner and eventually printer* (206 in figure 2 & 306 in figure 3 – see column 4 lines 7-60). It would have been obvious to a person of ordinary skill in the art of speech signal processing at the time of the invention to apply the method/teachings of Cherny to the device/method of Miyao et al or Kutsumi et al so as to consolidate translation features into an integrated package for ease of operation.

**Miyao et al, Kutsumi et al & Nunes et al**

37. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyao et al in view of Kutsumi et al and further in view of Nunes et al.

38. Regarding claim 12 as understood by the Examiner, the claim is set forth with the same limitations as claim 1. Neither Miyao et al nor Kutsumi et al mention scanning path. Nunes et al reads on the feature of a *scanner substantially arranged on the side and arranged for a sheet path substantially around the scanning head, being the sheet in scanning obliged to follow a substantially "C"-like path for entering into and getting out from the same side, on the computer side, turning around the scanning head* (24→21→29 in figure 1). It would have been obvious to a person of ordinary skill in the art of speech signal processing at the time of the invention to apply the method/teachings of Nunes et al to the device/method of Miyao et al in view of Kutsumi et al so as to reduce the space required by placing all paper handling on the same side.

39. Regarding claim 13 as understood by the Examiner, the claim is set forth with the same limitations as claim 1. Neither Miyao et al nor Kutsumi et al mention modular or extractable components. Nunes et al reads on the feature *that the scanner group is substantially made up of a substantially "C"-like case as a paper guide, external, where the internal group containing the reading head and the paper advancement system is inserted and extractable* (column 1 lines 11-15). It would have been obvious to a person of ordinary skill in the art of speech signal processing at the time of the invention

to apply the method/teachings of Nunes et al to the device/method of Miyao et al in view of Kutsumi et al to facilitate maintenance and repair.

### ***Conclusion***

40. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Oon (U.S. Patent 6,408,266 B1 – excerpt only) didactic & content oriented word processing method with incrementally changed belief system defines “translation bench”.
- Ito et al (Japan Patent 59-206985) mechanical translating system to save time and labor required for inputting of translation data by an OCR device.
- Sameth et al (U.S. Patent 5,697,789 A) for aiding foreign language instruction.
- Rubin et al (U.S. Patent 6,393,443 B1) for providing computerized word-based referencing.
- Okajima et al (U.S. Patent 4,502,128 A) translation between natural languages.
- Hiroe et al (Japan Patent 2001-117920) progressively outputs a translated sentence by progressive translation.
- Yoshimura et al (Japan Patent 05-089165) select kind of processing required in an expression method designated among the variation as to perfect/progressive form.
- Asano et al (Derwent-Acc-No: 1986-312850) intelligent digital language translation system - has analytical capability to identify context in which words are used to obtain correct translation, either interactive or automatically.

41. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Daniel A. Nolan at telephone (703) 305-1368 whose normal business hours are Mon, Tue, Thu & Fri, from 7 AM to 5 PM.

If attempts to contact the examiner by telephone are unsuccessful, supervisor Richemond Dorvil can be reached at (703)305-9645.

The fax phone number for Technology Center 2600 is (703)872-9314. Label informal and draft communications as "DRAFT" or "PROPOSED", & designate formal communications as "EXPEDITED PROCEDURE". Formal response to this action may be faxed according to the above instructions,

or mailed to:

P.O. Box 1450  
Alexandria, VA 22313-1450

or hand-deliver to: Crystal Park 2,  
2121 Crystal Drive, Arlington, VA,  
Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to Technology Center 2600 Customer Service Office at telephone number (703) 306-0377.

Daniel A. Nolan  
Examiner  
Art Unit 2654

DAN/d  
June 25, 2004

  
RICHEMOND DORVIL  
SUPERVISORY PATENT EXAMINER